Butterflies of the Cols of the Cévennes

By John Feltwell *

Introduction

This is the second and penultimate part of an entomological assessment of all the cols within the inner boundary of the National Park of the Cévennes (cf. Feltwell, 1977a). The reasons for undertaking such a venture are threefold; first, that the Cévennes are comparatively rich in species (Feltwell, 1977b), second, that the cols are often very rich in numbers of butterflies, particularly *Hipparchia semele* (Linnaeus) (Feltwell, 1976), and third, that the cols have not been assessed entomologically in view of the fact that it is now exactly a decade since the National Park of the Cévennes was set up to protect its own flora and fauna.

The second point raises certain questions such as why does it appear that there are often more butterflies seen at the cols than in the valleys; is it because the climate is more favourable, that the butterflies tend to fly up there from the valleys and stay there, or that there are more foodplants at the cols? Discussion will be reserved on these and other issues in the final part of this appraisal of the cols.

Ten further cols are described here (Table I) bringing the total so far visited to 21. The first five cols are on the massif of Mt. Lozère (1,699 m) in the northeast of the Park, while the remainder are on the massif of Mt. Aigoual (1,565 m) in the west and on the Causse Noir.

TABLE I
COLS IN THE NATIONAL PARK OF THE CEVENNES

	Col	Size of collecting area around Col (h)	Altitude (m)	Date visited
1	Col de la Loubière	5	1181	11.8.78
2	Col de la Croix de Berthel	10	1030	11.8.78
3	Col de Malpertus	5	900	11.8.78
4	Col de la Barraquette	2	996	11.8.78
5	Col de Jalcrest	<1	930	11.8.78
6	Col de Montjardin	30+	1005	21.8.78
7	Col de Perjuret	5	1028	21.8.78
8	Col de Bes	5	1215	21.8.78
9	Col de Salides	10	1014	21.8.78
10	Col de l'Estrade	3	1205	21.8.78

Results

Col de Finiels, which was last visited on the 3rd September 1977, (Feltwell, 1977a), was revisited on the way to the following cols and provided a few more species, notably several *Erebia meolans* Fruhstorfer, *Brenthis daphne* Schiffermüller and *Mellicta athalia* (Rottemburg). There were also a few *Argynnis lathonia* (Linnaeus), *Pieris rapae* (Linnaeus), *Coenonympha arcania* Linnaeus and a single *Autographa gamma* (Linnaeus). On the way up to the col from the north-west several *Heodes virgaureae* (Linnaeus) were seen feeding at the roadside.

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1. *Col de la Loubière*

This is one of the richer areas for butterflies. The col has two tracks leading away from it and was partially cultivated with a small crop of potatoes and a small paddock where hay had been taken. There were also areas of long grass and scrub where there was a marked abundance of *Melanargia galathea* (Linnaeus) and *Zygaena filipendulae* (Linnaeus) although there were also lesser numbers of *C. arcania* Linnaeus, *Hipparchia semele* (Linnaeus), *Maniola jurtina* (Linnaeus), *Hesperia comma* (Linnaeus), *Thymelicus sylvestris* (Poda) and *Lysandra coridon* (Poda). One *E. meolans* Fruhstorfer, *Zygaena trifolii* (Esper) and a *Procris* sp. were seen. Of the Pierids, *Pieris brassicae* (Linnaeus), *P. rapae* (Linnaeus), *Colias crocea* (Geoffrey) and a *Colias hyale* (Linnaeus) were seen on the wing, and of the Nymphalids *Aglais urticae* (Linnaeus), *Vanessa atalanta* (Linnaeus), *Cynthia cardui* (Linnaeus) and *A. lathonia* (Linnaeus) were seen.

2. *Col de la Croix de Berthel*

This is a junction of three made up roads and a track with a summit just to the south. The area had been burnt over about 2-3 years ago and there was a new growth of a very squat broom species (*Cytisus* sp.) as well as plenty of long grass. There was also heather (*Calluna vulgaris* Linnaeus), Purple loosestrife (*Lythrum salicaria* Linnaeus) and wild Raspberries (*Rubus ideaus* Linnaeus). In a field of lucerne (*Medicago sativa* Linnaeus) *P. brassicae* (L.), *P. rapae* (L.), *C. crocea* (Geoffrey), *T. sylvestris* (Poda) and *Coenonympha pamphilus* (Linnaeus) and *M. jurtina* (Linnaeus) were present. A single *Erebia* sp. was seen on the wing but was not caught for identification. Other butterflies which passed through were *M. galathea* (Linnaeus), *A. urticae* (Linnaeus) , *V. atalanta* (Linnaeus) and *Argynnis paphia* (Linnaeus).

3. *Col de Malpertus*

A very exposed, high col which had been completely burnt off some years previously and had regenerated with a very limited flora consisting only of broom, heather and grasses. Noticeable was the incessant hum of bees on the heather. Very few butterflies were present although it was a fine day and single specimens of *T. sylvestris* (Poda), *P. rapae* (L.), *Hipparchia stratilinus* Hufnagel and the diurnal moth, the Straw Belle (*Aspitates gilvaria* (Denis & Schiffermüller)), were seen.

4. *Col de Baraquette*

This col is situated along a roughly east-west ridge with views to the north and south. There is a small track which leads off to the north. Along the roadside verges and long grass were found *P. rapae* (L.), *Polyommatas icarus* (Rottemberg), *C. hyale* (Linnnaeus) and *A. paphia* (Linnaeus) as well as a male Oak Eggar (*Lasiocampa quercus* (Linnaeus)). It is perhaps worth noting that along the roads leading to and away from the col there were the Wood White (*Leptidea sinapis* (Linnaeus)), Swallowtail (*Papilio machaon* Linnaeus) and the Great-banded Grayling (*Brintesia circe* Fabricius).

5. *Col de Jalcrest*

Not a very exciting col entomologically as it comprises the intersection of five roads which had been recently widened; the gravel verges were supporting a collection of ephermerals on which were *P. rapae* (Linnaeus), *C. crocea* (Geoffroy) and *C. pamphilus* (Linnaeus). At one edge there was a source of water and feeding on the flowers of the prolific brambles were Peacocks (*Inachis io* (Linnaeus)) and a small unidentified Fritillary. The col was surrounded by chestnut woods.

6. *Col de Montjardin*

An unmarked col (without the customary sign) which lies on the corner of a hill overlooking the barren-looking Causse Noir. The col is made up of grass pasture, with patches of broom (*Cytisus* sp.) and sloe (*Prunus spinosa* Linnaeus). There were two fields of lucerne which had collected some butterflies.

The grass pasture adjacent to the road was studded with an amazing variety of wild flowers and here over twenty-five species of butterfly were noted in the space of twenty minutes or so within a few square metres. In abundance everywhere were *C. hyale* (Linnaeus) — ten to fifteen could be counted at any one time — and *G. rhamni* (Linnaeus). There were few *G. cleopatra* Linnaeus and *C. crocea* (Geoffroy). In the grass were *M. jurtina* (Linnaeus), *C. pamphilus* (Linnaeus), *H. semele* (Linnaeus), *Pyronia tithonus* (Linnaeus), *M. galathea* (Linnaeus), *Arethusana arethusa* Schiffermüller and *Chazara briseis* Linnaeus. Of the blues and coppers, those present were *P. icarus* (Rottemburg), *Agrodiaetus dolus* Hübner, *Lysandra coridon* (Poda) and *Lycaena phlaeus* (Linnaeus). Skippers were represented by *T. sylvestris* (Poda), *Ochlodes venata* Turati, *H. comma* (Linnaeus) and *Muschampa proto* Ochsenheimer; and Nymphalids which were generally feeding from thistle flowers were *A. urticae* (Linnaeus), *C. cardui* (Linnaeus), *A. lathonia* (Linnaeus) (Common) and *Argynnis aglaja* Linnaeus. In the lucerne were *P. brassicae* (Linnaeus) and *P. rapae* (Linnaeus).

7. *Col de Perjuret*

This is situated around a small hamlet which had a cabbage patch, a plot of corn, grassy meadow and some areas of wild stony grassland with tall thistles. This was not a particularly rich area for butterflies and small numbers of each species were encountered. Crossing the meadow from time to time were *M. galathea* (Linnaeus), *M. jurtina* (Linnaeus), *P. tithonus* (Linnaeus), *P. icarus* (Rottemburg), *L. coridon* (Poda), *C. crocea* (Geoffroy), *C. hyale* (Linnaeus), *L. phlaeas* (Linnaeus) and *T. sylvestris* (Poda). Towards some trees were found several *B. circe* Fabricius. On the thistles were *C. cardui* (Linnaeus), *V. atalanta* (Linnaeus) and *G. rhamni* (Linnaeus) and in the cabbages are were *P. rapae* (Linnaeus) and *P. brassicae* (Linnaeus).

A more profitable spot for entomology may be had at the Col de Fourges (1,040 m) which is about one kilometre away from the Col de Perjuret along the D18 road, but as

this is not mentioned on the official Cévennes map, it does not fulfil one of the purposes of this study (see Feltwell, 1977a).

8. *Col de Bes*

This is situated a little way off the crossroads at Cabrillac and insects were studied around its base. In exceptional abundance were *H. virgaurae* Linnaeus which seemed to be on every flower. There were also plenty of whites, *P. brassicae* (Linnaeus), *P. rapae* (Linnaeus), *P. napi* (Linnaeus), *G. rhamni* (Linnaeus), *G. cleopatra* (Linnaeus), *C. crocea* (Geoffroy) and *C. hyale* (Linnaeus). Browns were represented by *M. jurtina* (Linnaeus), *C. pamphilus* (Linnaeus), *C. arcania* Linnaeus, *M. galathea* (Linnaeus) and *H. semele* (Linnaeus). *Nymphalids* were represented by *A. lathonia* (Linnaeus), *A. aglaja* (Linnaeus) and other smaller fritillaries which were not captured for identification. On the thistle flowers were *V. atalanta* (Linnaeus), *T. sylvestris* (Poda), *P. icarus* (Rottemburg) and *Ochlodes venatus* (Turati). A particularly fine specimen of the diurnal *Lythria purpuraria* (Linnaeus) was photographed on grass, this specimen being very poorly represented in Great Britain. On Broom a parasitised larva of the Grass Emerald (*Pseudoterpna pruinata* (Hufnagel)) was found; the parasites turning out to be *Apanteles triangulator* (Wesmael).

9. *Col de Salides*

The very exposed col has many grassy slopes with small growth of broom. There are Pine plantations nearby and a large part of this had been burnt two days previously. Butterflies were fairly difficult to find because of the lack of flowers but small numbers of *H. semele* (Linnaeus), *M. jurtina* (Linnaeus), *C. pamphilus* (Linnaeus), *H. comma* (Linnaeus), *P. icarus* (Rottemburg) and *T. sylvestris* (Linnaeus) were present. Quite noticeable was the abundance of *B. circe* Fabricius which were patrolling a wooded area and around some ruins. Single specimens of *M. galathea* (Linnaeus), *H. virgaurea* Linnaeus, *V. io* (Linnaeus), *C. hyale* (Linnaeus) and *P. rapae* (Linnaeus) were seen.

10. *Col de l'Estrade*

This is more of an inaccessible col than the others described in this paper. It lies along a track which leads up from the Tarnon and is surrounded by pine. Fortunately there were many clearings whre wild raspberries and brambles grew in profusion and here *A. aglaja* (Linnaeus), *A. lathonia* (Linnaeus) and *Argynnis adippe* Schiffermüller were plentiful. Other visitors to these clearings were *P. rapae* (Linnaeus), *P. napi* (Linnaeus), *V. io* (Linnaeus), *H. virgaurea* Linnaeus and *A. urticae* Linnaeus. In the long grass were *Erebia meolans* Fruhstorfer, *M. jurtina* (Linnaeus) and *T. sylvestris* (Poda).

Comment

A noticeable feature of the butterflies of the Cévennes is the summer of 1978 was that Clouded Yellow (*Colias* sp.) were unusually abundant and were seen throughout the Park during most of August. In many years, Clouded Yellows are fairly infrequent. They were recorded from eight of the cols described here.

The greater number of butterflies at the Col de Montjardin near Lanuejols in the west of the Park is worthy of special mention; so too was the abundance of *H. virgaurae* Linnaeus at Col de Bes near Mt. Aigoual. In both cases many flowers were present. The year of 1978 will no doubt be remembered in the Cévennes for both the hot and dry summer and the unusually great profusion of butterflies.

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References

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Purple Emperors at Play. — During the afternoon of July 21st I led a party round the Wiltshire Trust for Nature Conservation's reserve at Blackmoor Copse. It was a poor day for butterflies, sunless and with a cold N.W. wind, so few insects showed up as we walked round the rides. As we left the Copse at about 4 o'clock the sun suddenly put in an appearance and transformed what had hitherto been a rather dull afternoon into something quite different. First one then another ♂ Purple Emperor appeared and chased each other round an oak tree by the roadside. Presently two more joined them and all four engaged in a sort of aerial battle the contestants being joined periodically by Purple Hairstreaks which darted into the fray. At lower levels White Admirals and Silver-washed Fritillaries sought refreshment from the bramble blossom in the hedgerow while on the road itself some twenty excited spectators stood glued to the tarmac with their binoculars trained on the battling Emperors. After a few minutes clouds again blotted out the sun and the actors vanished leaving the spectators to make their way back to their cars with the memory of a most unexpected spectacle to take away with them. — Major General C. G. Lipscomb, The Riding, Knook, Near Warminster, Wiltshire, 27.vii.79.

Prolonged Hatching of Ennomos alniaria L. — Some long ribbons of eggs of this species were laid on the same night by the same female. Come next year however the eggs started hatching on 14 May and continued right through until 17 June. We are very familiar with pupae lying over for more than one year and of course of varying growth rates of larvae depending on food and location, as well as staggered emergence of moths from the same brood. Variation in date of egg hatching adds a further variable to the device used by insects to spread their survival chances. — G. M. Haggett.